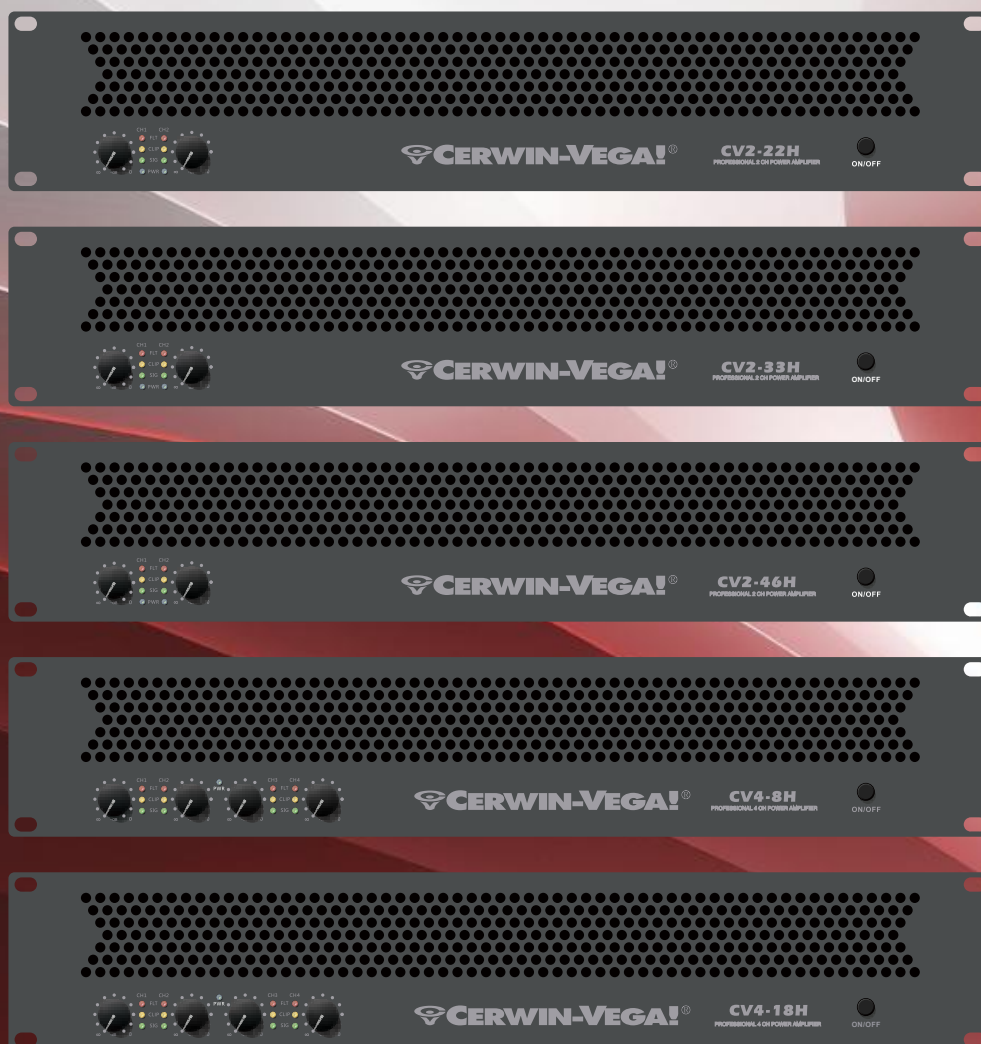




CV2-22H/CV2-33H/CV2-46H
CV4- 8H/CV4-18H

PROFESSIONAL POWER AMPLIFIER SERIES
HEAVY DUTY PROFESSIONAL AMPLIFIER



QUICK START GUIDE

IMPORTANT SAFETY INSTRUCTIONS

WARNING

1. Read these instructions - All the safety and operating instructions should be read before this product is operated.
2. Retain these instructions - The safety and operating instructions should be retained for future reference.
3. Heed all warnings - All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow all instructions - All operating and use instructions should be followed.
5. Do not use this apparatus near water. The appliance should not be used near water or moisture, for example, in a wet basement or near a swimming pool, and the like.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding plug. A polarized plug has two blades, one of which is wider than the other. A grounding plug has two blades and a third grounding prong.
10. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
11. Protect the power cord from being walked on or pinched, particularly at the plugs, convenience receptacles, and the point where it exits the apparatus.
12. Only use attachments/accessories specified by the manufacturer. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When using a cart or rack, exercise caution when moving the cart/apparatus combination to prevent injury from tip-over.
13. Unplug the apparatus during lightning storms or when it is unused for long periods.
14. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power supply cord or plug is damaged, liquid has been spilled, objects have fallen into the apparatus, it has been exposed to rain or moisture, it does not operate normally, or it has been dropped.
15. Please keep the unit in a well-ventilated environment.
16. WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing, and no objects filled with liquids, such as vases, shall be placed on the apparatus.
17. WARNING: The mains plug or appliance inlet is used as a disconnect device; the disconnect device shall remain readily operable.
18. Power Sources - This product should be operated only from the type of power source indicated on the rating label. If you are unsure of the kind of power supply in your home, consult your product dealer or the local power company. For products intended to operate from battery power or other sources, refer to the operating instructions.
19. Safety Check - After completing any service or repair on this product, ask the service technician to perform a safety check to ensure the product is in proper operating condition.
20. Don't touch conductive parts of output terminals to prevent hazardous electrical shock. The external wiring connected to the terminals requires installation by a qualified person or the use of pre-made leads or cords.
21. This equipment is for commercial & professional use only.
22. This product complies with EU WEEE regulations. Disposal of end-of-life produce should not be treated as municipal waste. Please refer to your local regulations for instructions on the proper disposal of this product.



CAUTION: Risk of burns. The surface may become hot during operation. Do not touch.



Protective earthing terminal. The apparatus should be connected to a mains socket outlet with a protective earthing connection.



This lightning flash is intended to alert the user to the presence of non-insulated "dangerous voltage" on the output terminals that may be of sufficient magnitude to constitute a risk of electric shock. The external wiring connected to the terminals requires installation by an instructed person or the use of ready-made leads or cords.



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION: To reduce the risk of electric shock, do not remove any cover. No user-serviceable parts inside. Refer servicing to qualified service personnel only.



The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying this appliance.

CAUTION:

To prevent electric shock, do not use this polarized plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.



This equipment is not suitable for use in locations where children are likely to be present. Keep body parts away from fan blades.

CONGRATULATIONS

Welcome to the Cerwin-Vega Family!

You've joined a growing group of audio professionals who have turned to Cerwin-Vega for advanced audio reproduction systems. All Cerwin-Vega products are thoroughly tested to ensure they meet or exceed our performance specifications.

Backed by the best service in the industry, Cerwin-Vega is dedicated to quality and reliability.

This guide covers the Cerwin-Vega CV2 and CV4 Series Professional Power Amplifiers. The series includes the following five models: CV2-22H, CV2-33H, CV2-46H, CV4-8H & CV4-18H.

FEATURES

The CV2 and CV4 series amplifiers deliver the following power ratings

<i>Model</i>	<i>Series</i>	<i>Channels</i>	<i>Power (Per Channel @ 8)</i>	<i>Power (Per Channel @ 4)</i>	<i>Power (Bridged Mono @ 8)</i>
CV2-22H	CV2	2	2x670 Watts	2x1070 Watts	2260 Watts
CV2-33H	CV2	2	2x870 Watts	2x1370 Watts	2880 Watts
CV2-46H	CV2	2	2x1240 Watts	2x1810 Watts	3820 Watts
CV4-8H	CV4	4	4x320 Watts	4x490 Watts	2x1420 Watts
CV4-18H	CV4	4	4x540 Watts	4x820 Watts	2x1820 Watts

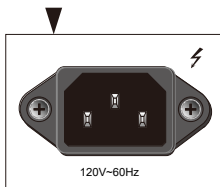
Key Features & Technologies

- Advanced Thermal Management:** An efficient heat sink combined with a variable-speed cooling fan maintains optimal operating temperatures under all load conditions.*
- Comprehensive Protection Circuitry:** Equipped with a full suite of protective circuits, including signal limiting, soft-start/shut-down (anti-thump), DC fault protection, output short circuit protection, and thermal overload guarding.*
- Integrated Signal Limiter:** A built-in limiter automatically prevents clipping and protects connected loudspeakers from damaging audio spikes.*
- High-Fidelity Audio Performance:** Delivers superior signal fidelity, ensuring transparent and natural sound reproduction.*
- Per-Channel Status Indicators:** Each channel features dedicated Signal Present and Clip/Overload LED indicators for at-a-glance monitoring.*
- SMD Construction:** Utilizes state-of-the-art Surface Mount Device (SMD) technology for enhanced stability, reliability, and performance consistency.*

CV2 SERIES QUICK SET UP

1. Connect the AC power cord

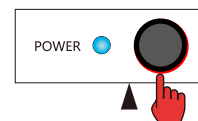
- Ensure that the AC Mains receptacle chosen matches the amplifier voltage requirements of 120VAC @ 60Hz.
- Before connecting the AC power cord, be sure the amplifier power switch is in the off position.
- This amplifier has third wire (earth ground) grounding protection



2. Turn on the power amplifier

Before powering on the amplifier:

- Be sure all volume controls are set to minimum.
- Be sure all speakers are properly connected to the amplifier.
- Be sure to set the amplifier mode switch is set to the proper position.
- Be sure the amplifier power cord is plugged into an approved AC mains receptacle.
- Power on the unit pressing the on/off button shown below.



CERWIN-VEGA!

CV2-22H

ON/OFF

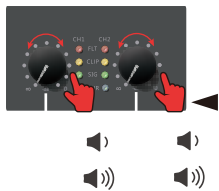
3. Using the "mode" switch



3.1 Stereo Mode

In Stereo Mode, both amplifier channels operate independently. This is the standard configuration for listening to stereo audio, where each channel processes a separate left or right signal.

- ▮ **Signal Path:** Each input is routed directly to its corresponding output.
INPUT-CH1 → OUTPUT1
INPUT-CH2 → OUTPUT2
- ▮ **Volume Control:** The volume for each channel can be adjusted separately using the CH1 and CH2 knobs.

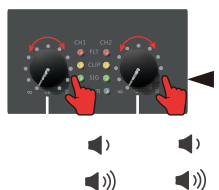


CERWIN-VEGA!® CV2-22H ON/OFF

3.2 Parallel Mode

In Parallel Mode, the signal from a single input is sent to both output channels. This is useful for driving two separate speakers with the same mono signal from one source.

- ▮ **Signal Path:** The signal from INPUT-CH1 is routed to both outputs:
INPUT-CH1 → OUTPUT1
INPUT-CH1 → OUTPUT2
- ▮ **Volume Control:** The volume for each channel can be adjusted separately using the CH1 and CH2 knobs.



CERWIN-VEGA!® CV2-22H ON/OFF

3.3 Bridge Mode

In Bridge Mode, both amplifier channels are combined to create a single, high-power mono output. This configuration is ideal for driving a large subwoofer or a passive speaker that requires maximum power.

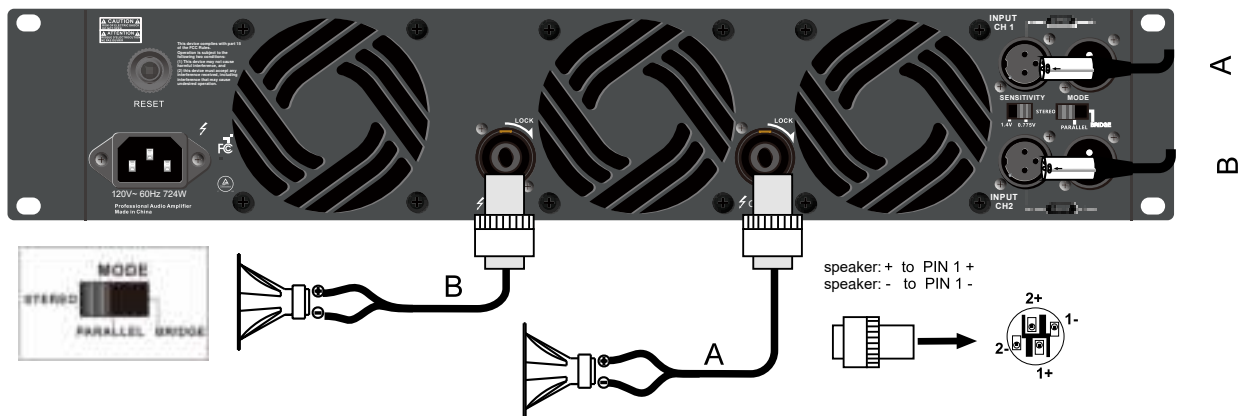
- ▮ **Signal Path:** The signal enters through INPUT-CH1.
- ▮ **Volume Control:** Use the CH1 knob to adjust the volume.
- ▮ **Disabled Input:** In this mode, the input and volume control for CH2 are inactive.



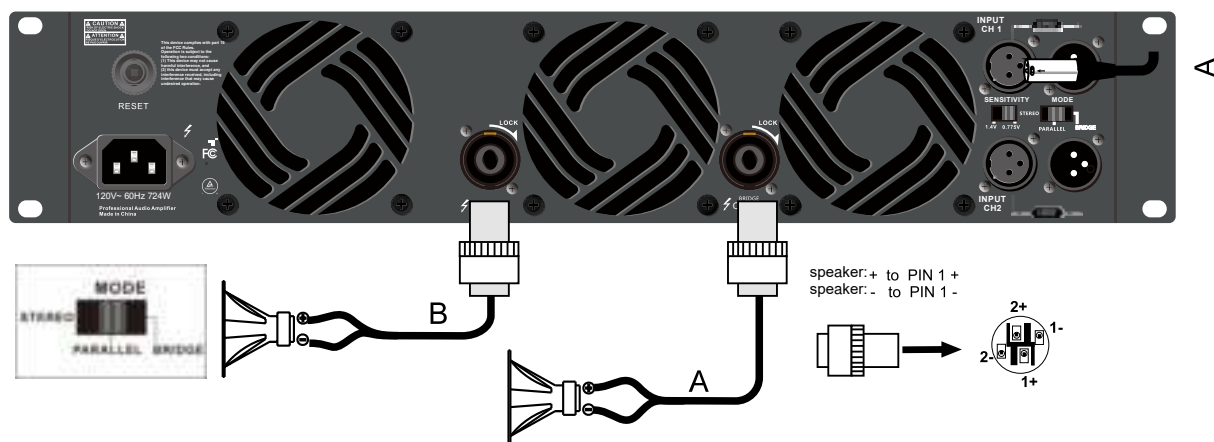
CERWIN-VEGA!® CV2-22H ON/OFF

4. Speakon output connection (2CH)

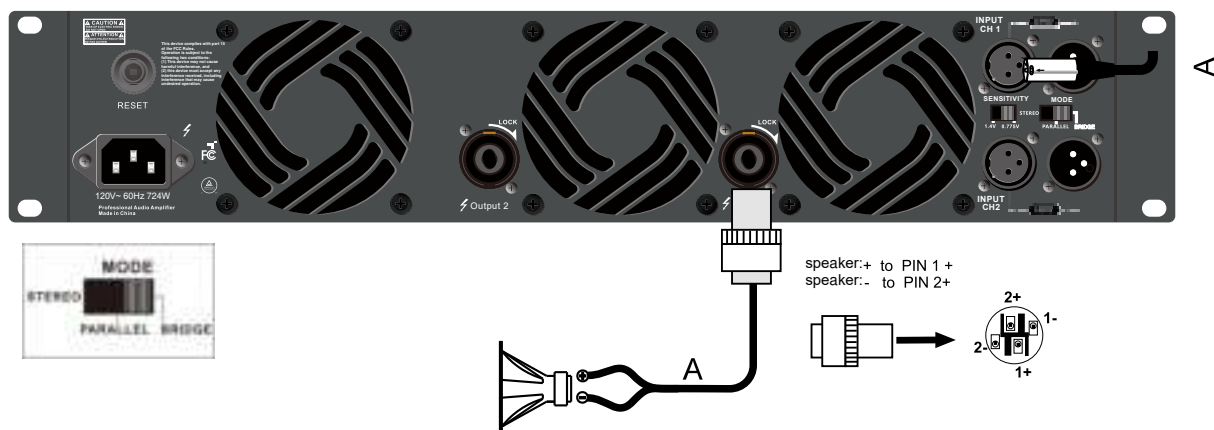
Stereo Connection: Connect the positive speaker wire to the PIN 1+ terminal of the SPEAKON connector, and the negative speaker wire to the PIN 1- terminal.



Parallel Connection: Connect the positive speaker wire to the PIN 1+ terminal of the SPEAKON connector, and the negative speaker wire to the PIN 1- terminal.



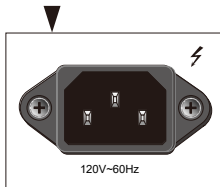
Bridge Connection: Connect the positive speaker wire to the PIN 1+ terminal of the SPEAKON connector, and the negative speaker wire to the PIN 2+ terminal.



CV4 SERIES QUICK SET UP

1. Connect the AC power cord

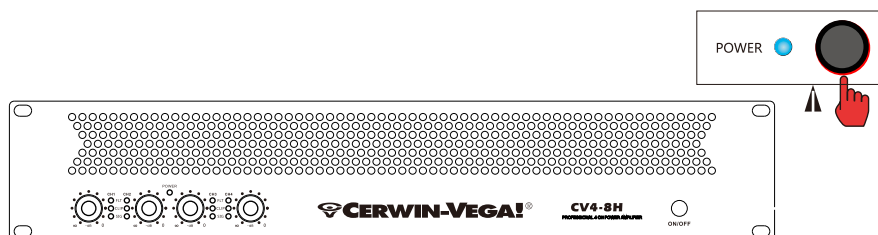
- 1. Ensure that the AC Mains receptacle chosen matches the amplifier voltage requirements of 120VAC @ 60Hz.
- 2. Before connecting the AC power cord, be sure the amplifier power switch is in the off position.
- 3. This amplifier has third wire (earth ground) grounding protection



2. Turn on the power amplifier

Before powering on the amplifier:

- 1. Be sure all volume controls are set to minimum.
- 2. Be sure all speakers are properly connected to the amplifier.
- 3. Be sure to set the amplifier mode switch is set to the proper position.
- 4. Be sure the amplifier power cord is plugged into an approved AC mains receptacle.
- 5. Power on the unit pressing the on/off button shown below.



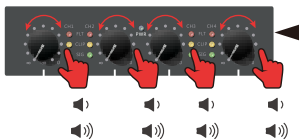
3. Using the "mode" switch



3.1 Stereo Mode:

In Stereo Mode, each of the amplifier's four channels operates independently. The signal from each input is sent directly to its corresponding output:

- | **Signal Path:** Each input is routed directly to its corresponding output.
INPUT-CH1 → OUTPUT1; INPUT-CH2 → OUTPUT2;
INPUT-CH3 → OUTPUT3; INPUT-CH4 → OUTPUT4.
- | **Volume Control:** The volume for each channel can be adjusted separately using the CH1, CH2, CH3, CH4 knobs.



CERWIN-VEGA!

CV4-8H

PROFESSIONAL 4-CHANNEL AMPLIFIER

ON/OFF

3.2 Parallel Mode

In Parallel Mode, the signal from INPUT-CH1 is distributed to all four output channels, while the other inputs are disabled. This allows you to drive all outputs from a single source.

- | **Signal Path:** The signal from INPUT-CH1 is routed to OUTPUT1, OUTPUT2, OUTPUT3, and OUTPUT4.
- | **Volume Control:** The volume for each channel can be adjusted separately using the CH1, CH2, CH3, CH4 knobs.
- | **Disabled Inputs:** INPUT-CH2, INPUT-CH3, INPUT-CH4



CERWIN-VEGA!

CV4-8H

PROFESSIONAL 4-CHANNEL AMPLIFIER

ON/OFF

3.3 Bridge Mode

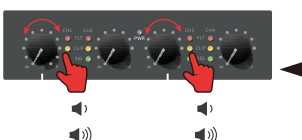
In Bridge Mode, the amplifier combines pairs of channels to create two independent, high-power mono outputs. This is ideal for driving large subwoofers or passive speakers that require more power.

Bridged Channel 1 (using CH1/CH2)

- | **Input:** The signal enters through INPUT-CH1.
- | **Output:** The combined mono signal exits through the terminal labeled OUTPUT1 (Bridge)
- | **Volume Control:** Use the CH1 knob to adjust the volume.

Bridged Channel 2 (using CH3/CH4)

- | **Input:** The signal enters through INPUT-CH3.
- | **Output:** The combined mono signal exits through the terminal labeled OUTPUT3 (Bridge)
- | **Volume Control:** Use the CH3 knob to adjust the volume.



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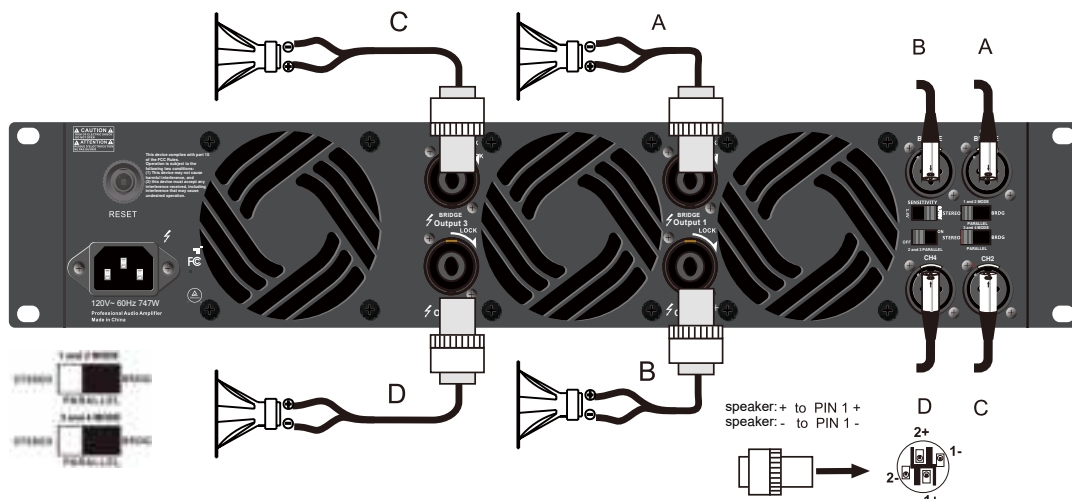
CV4-8H

PROFESSIONAL 4-CHANNEL AMPLIFIER

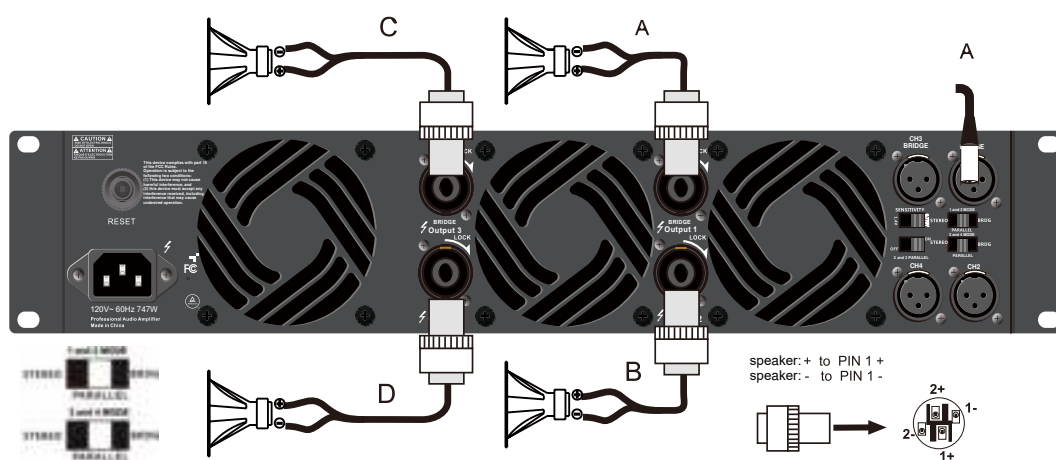
ON/OFF

4. Speakon output connection (4CH)

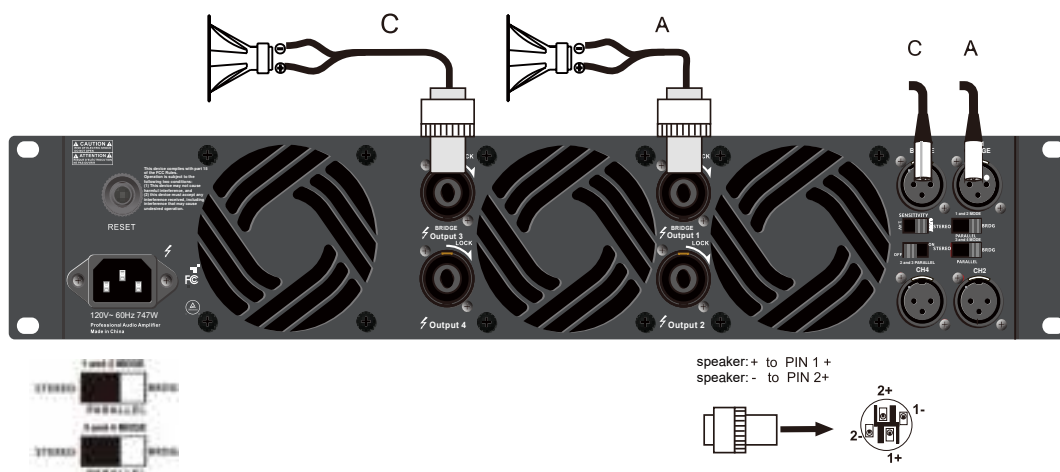
- Stereo Connection:** Connect the positive speaker wire to the PIN 1+ terminal of the SPEAKON connector, and the negative speaker wire to the PIN 1- terminal.



- Parallel Connection:** Connect the positive speaker wire to the PIN 1+ terminal of the SPEAKON connector, and the negative speaker wire to the PIN 1- terminal.



- Bridge Connection:** Connect the positive speaker wire to the PIN 1+ terminal of the SPEAKON connector, and the negative speaker wire to the PIN 2+ terminal.



SPECIFICATIONS

Series	CV2 Series			CV4 Series	
Specifications	CV2-22H	CV2-33H	CV2-46H	CV4-8H	CV4-18H
Rated Power (per Ch.)					
8 Stereo	2 x 670W	2 x 870W	2 x 1240W	4 x 320W	4 x 540W
4 Stereo	2 x 1070W	2 x 1370W	2 x 1810W	4 x 490W	4 x 820W
Bridge Mono Power	2260W	2880W	3820W	2 x 1420W	2 x 1820W
Performance					
Voltage Gain	35dB	36dB	38.3dB	33dB	33dB
Net Weight	9.5 kg/ 20.94 lbs.	9.5 kg / 20.94 lbs.	9.5 kg / 20.94 lbs.	8.0 kg / 17.64 lbs.	8.0 kg / 17.64 lbs.
Chassis Size (mm)	482 x 227 x 88	482 x 227 x 88	482 x 227 x 88	482 x 233 x 88	482 x 233 x 88
Common to all amplifiers					
Frequency Response	20Hz - 20kHz, +0/-1dB (at 1 Watt)				
Total Harmonic Distortion	<0.5%, 20Hz - 20kHz				
Intermodulation Distortion	<0.35% (60Hz & 7kHz at 4:1 from full output to -30dB)				
Slew Rate	>20V/μs				
Damping Factor	>200 (at 8 , 10Hz - 400Hz)				
Signal-to-Noise Ratio	>100dB (A-weighted)				
Crosstalk	-75dB at 1kHz, -58dB at 20kHz				
Input Sensitivity	0.775V or 1.4V				
Input Impedance	20k (Balanced), 10k (Unbalanced)				
Attribute					
Chassis Standard	E.I.A International Standard				
Rack Mountable	2U (Fits standard 19-inch racks)				
Chassis Height	88 mm (3.5 inches)				
Construction					
Protection	Short circuit, no-load, on/off muting, RF interference				
Cooling	Flow-through ventilation with forced air and thermal protection				
Power Cord	Plug: 10A, 120VAC / Wire: 3x1.0mm ²				

Note:

Use the front panel knobs to adjust volume; for long-term non-use, always turn the volume to minimum, power off the amplifier, and unplug all cables starting with the power cord first.



For detailed panel introduction, safety instructions, and warranty policy of this equipment, please refer to the online manual.

<https://cerwinvega.com/pages/manuals?>



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CerwinVega.com

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